PTO/SB/08A (08-03)

Approved for use through 07/31/2006, OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

EN TROPE

Sheet

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known					
Application Number	10/663,551				
Filing Date	September 16, 2003				
First Named Inventor	William J. Borland				
Art Unit	2831				
Examiner Name					
Attorney Docket Number	EL DADE LIS NA				

				U. S. PATENT D	OCUMENTS	
Examiner Initials*	Cite No. <sup>1</sup>		Document Number  mber-Kind Code <sup>2 (F known)</sup>	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
gan		US-	5,745,333	04-28-1998	Frankeny et al.	
7		US-	6,215,649 B1	04-10-2001	Appelt et al.	
•		US-	6,274,224 B1	08-14-2001	O'Bryan et al.	·
<b>-</b>		US-				
		US-			***************************************	
		US-	<u></u>			'
		US-				
		US-				
		US-	· ** ** ** ** ** ** ** ** ** ** ** ** **			
		US-				
		US-				
		US-				
		US-				
		US-	·			
		US-				
		US₊		1		
•		US-				
		US-				
		US-	<del></del>			

		FORE	IGN PATENT DOCU	MENTS		
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>8</sup> (# known)	MM-DD-YYYY		Or Relevant Figures Appear	T <sup>6</sup>
JOH		EP 0 409 668 A2	01-23-1991	Omron Corp.		ΙΤ
		EP 1 093 327 A2	04-18-2001	DuPont		
•		EP 1 265 466 A2	12-11-2002	Dai Nippon Printing		
			•	Co.		

Examiner Signature Grand Norvic Co	ate J-17-05
------------------------------------	-------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at <a href="www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE

PTO/SB/08b (08-03) Approved for use through 06/30/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Complete if Known

10/663,551

the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Application Number

Filing Date

INFO	INFORMATION DISCLOSURE		ocptember 10, 2000				
STAT	TEME	ENT BY A	<b>\PPL</b>	ICANT	First Named Inventor	William J. Borland	
					Art Unit	2831	
	(Use as	many sheets as	necessary	)	Examiner Name		
Sheet		1 of 1			Attorney Docket Number	EL0496 US NA	
				NON PATE	NT LITERATURE DOCUMENTS	3	
Examiner Initials*	Cite No. <sup>1</sup>	Include name magazine,	of the au journal, s	thor (in CAPITA erial, symposiu	AL LETTERS), title of the artic m, catalog, etc.), date, page( and/or country where public	cle (when appropriate), title of the item (book, s), volume-issue number(s), publisher, city shed.	T²
por		DR. KIM	FJELDS		ACEY L. CHASE, EMBED S, CIRCUITREE, Volume	DDED PASSIVES: LASER TRIMMED 370, March 2002.	
***************************************				101 (100 100 100 100 100 100 100 100 100			
			rrê*s pro 2000, s 2000				

Examiner Signature	general	Varris	Date Considered	3-12-05

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Approved for use through 07/31/2008, OMB 0851-0031
U.S. Petent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
er the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

THE TRADEGIAL

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known					
Application Number	10/663,551				
Filing Date	September 16, 2003				
First Named Inventor	William J. Borland				
Art Unit	2831				
Examiner Name					
Attorney Docket Number	EL DADE LIS NA				

				U. S. PATENT D	OCUMENTS	
Examiner Initials*	Cite No.1	N	Document Number umber-Kind Code <sup>2 (Firrour)</sup>	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
AN.		US-	4,190,854	02-26-1980	Redfern	
7		US-	6,317,023	11-13-2001	Felten	
		US-	6,631,551	10-14-2003	Bowles et al.	
		US-	2002/0179329 A1	12-05-2002	Fukuoka et al.	
-		US-	2003/0154592 A1	08-21-2003	Felten	
-		US-				
		US-				
		US-				
		US-				
		US-				
		US-			**	
		US-	<del></del>		· · · · · · · · · · · · · · · · · · ·	
	<del></del>	US-	<del>-</del>			-
		US-				
		US-		1		
	l	US-		<del> </del>		
		US-				
		US-		1		
		US-				

Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)	MM-DD-YYYY		Or Relevant Figures Appear	Ţ
(20)		JP 2003-92460	05-31-2002			
		JP 2-153589	06-13-1990	Ibiden KK		
4		JP 2001-168491	12-02-1999			
						L
						L

	<u></u>		
Examiner Signature	Gereny Norris	Date Considered	3-18-05

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered, include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. Enter Office that Issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

A TRADEM

PTO/SB/08b (08-03) Approved for use through 06/30/2006. OMB 0551-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

nder the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO Complete if Known Application Number 10/663,551 INFORMATION DISCLOSURE Filing Date September 16, 2003 STATEMENT BY APPLICANT First Named Inventor William J. Borland Art Unit 2831 (Use as many sheets as necessary) Examiner Name Sheet Attorney Docket Number EL0496 US NA

		NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (bool magazine, Journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.				
Den		JOHN FELTEN AND SAUL FERGUSON, Embedded Ceramic Resistors and Capacitors for PWB, IP Printed Circuit Expo, San Diego, CA, April 2000.				
		JOHN J. FELTEN AND SAUL FERGUSON, Ceramic Resistors and Capacitors Embedded in PWB, IPC, San Diego, April 5, 2000.				
	40000 (50 40000) (52	JOHN J. FELTEN AND SAUL FERGUSON, Ceramic Resistors and Capacitors Embedded in PWB, IMAPS, Denver, April 29, 2000.				
		JOHN J. FELTEN AND WILLIAM J. BORLAND, Embedded Ceramic Passives in PWB: Process Development, IPC Printed Circuit Expo, Anaheim, CA, April 2001.				
		JOHN J. FELTEN AND WILLIAM J. BORLAND, Ceramic Resistors and Capacitors Embedded in PWB's, IPC Expo, April 3, 2001.				
		WILLIAM BORLAND, Designing for Embedded Passives, Printed Circuit Design, August 2001.				
Examiner Signature	le	Perry Work S-17-09				

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

/	C	1	f	E	7
是	HÁL	Í	5	2004	C20 1

PTO/SB/08b (08-03)

Approved for use through 06/30/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Approved for use through 06/30/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Approved for use through 06/30/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Approved for use through 06/30/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Approved for use through 06/30/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Approved for use through 06/30/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

APPROVED TO The Paperwork Reduction Act of 1995, no persons are required to respond to a collection of Information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO					Complete If Known		
					Application Number	10/663,551	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				SURE	Filing Date	September 16, 2003	
				CANT	First Named Inventor	William J. Borland	
(Use as many sheets as necessary)					Art Unit	2831	
					Examiner Name		
$\overline{\ }$	Sheet	3	of	3	Attorney Docket Number	EL0496 US NA	

		NON PATENT LITERATURE DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.						
gap		WILLIAM BORLAND, JOHN J. FELTEN, Thick Film Ceramic Capacitors and Resistors inside Printed Circuit Boards, 34th International Symposium on Microelectronics (IMAPS), Oct. 9-11th, 2001, Baltimore, MD.						
		JOHN FELTEN, RICHARD SNOGREN, JIMING ZHOU, Embedded Ceramic Resistors and Capacitors in PWB: Process and Performance, Fall IPC Meeting, October 11, 2001, Orlando, FL.						
***************************************		WILLIAM J. BORLAND AND SAUL FERGUSON, Embedded Passive Components in Printed Wiring Boards, a Technology Review, To be published in CircuiTree Magazine, 2001.						
	••••••••••••••••••••••••••••••••••••••	JIMING ZHOU, JOHN D. MYERS AND JOHN J. FELTEN, Embedded Passives Technology for PCBs: Materials, Design, and Process, IMAPS 2002 Conference, Denver, CO, Sept. 4-6, 2002.						
		JOHN J. FELTEN, Electronic Circuits World Convention, Paper number IPC31, Advanced Embedded Passives Technologies - Putting Ceramic Components into Organic PWBs.						
	***************************************	WILLIAM BORLAND, JOHN J. FELTEN, SAUL FERGUSON, ALTON B. JONES AND ANGELA A. LAWRENCE, Embedded Singulated Ceramic Passives in Printed Wiring Boards, IMAPS Advanced Technology Workshop on Passive Integration, Ogunquit, ME, June 19-21, 2002.						
Examiner Signature	9.	Prany Nouric Date Considered 3-17-05						

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents. P.O. Box 1450, Alexandria, VA 22313-1450. ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.